

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX LABORATORY 1337 S. 46TH STREET BLDG. 201 RICHMOND, CA 94804-4698

OCT 0 3 2001

MEMORANDUM

SUBJECT: Case R01S26, SDG 01240A

Results for Perchlorate Analysis

FROM: Brenda Bettencourt, Director

EPA Region 9 Laboratory (PMD-2)

TO: Kevin Mayer, Remedial Project Manager

Northern California Cleanup Section (SFD-7-2)

Attached are the report narrative and results spreadsheet from analysis of samples from the Colorado River Perchlorate Study. These data have been reviewed in accordance with EPA Region 9 Laboratory policy. Summary information for the data included in this report is as follows:

SITE/PROJECT: Colorado River Perchlorate Study

CASE: R01S26

LABORATORY: U. S. EPA Region 9 Laboratory

SAMPLE DELIVERY GROUP(s): 01240A

ANALYSIS: Perchlorate (EPA method 314.0)

A full documentation package for these data, including raw data and sample custody documentation, has been prepared and is filed at the Region 9 Laboratory. Please contact Vance Fong of the Quality Assurance Program (PMD-3) to request further review and/or validation of the data.

If you have any questions please contact Rich Bauer at (510) 412-2312, or Ken Hendrix at (510) 412-2321.

ATTACHMENT: Analytical Report

USEPA REGION 9 LABORATORY REPORT NARRATIVE

CASE NUMBER:

SAMPLE DELIVERY GROUP:

PROGRAM:

DOCUMENT CONTROL #:

DATE:

ANALYSIS:

SAMPLE NUMBERS:

R01S26

01240A

SUPERFUND

B0101011-0596

09/24/01

Perchlorate

SAMPLE ID

LABORATORY SAMPLE ID

Las Vegas Wash@North Shore Road Bridge

AB32247

GENERAL COMMENTS

One water sample was received from the Colorado River Perchlorate Study Superfund project on 08/28/01.

The requested analysis was perchlorate by SOP #531 (EPA Method 314.0). The sample was analyzed within the suggested 28-day holding time.

SAMPLE RECEIPT AND PRESERVATION

No shipping or preservation issues were encountered.

OC COMMENTS

No analyte was detected in the LRB associated with this SDG.

The perchlorate result for QC sample AB32247 was greater than 4x the added LFM of 5 ug/L and 25 ug/L. No LFM and LFM duplicate recoveries were calculated for perchlorate.

The RPD between the sample and duplicate for perchlorate was less than the 20% QC limits.

The LFB result was within the 90-110% QC limits.

Questions concerning the data can be answered by Osell Salvador at (510) 412-2358.

GLOSSARY

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

<u>Laboratory Fortified Matrix (LFM), Laboratory Fortified Matrix Duplicate (LFMD) and Laboratory Duplicate (LD)</u> Analysis

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

EPA REGION 9 LABORATORY-RICHMOND, CA SUMMARY OF ANALYTICAL RESULTS

Analysis:

Matrix:

Perchlorate

Water

Case Number:

R01S26

Site:

Colorado River Perchlorate Study

SDG:

01240A

Date:

09/24/01

| Sample No. | N/A | | | Reagent | | | - | Quantitation |
|--------------------|---|---|-----|---------|---|---|-----|--------------|
| Sample I.D. | Las Vegas Wash @North Shore Road Bridge | | | Blank | | | | Limit |
| Lab Sample I.D. | AB32247 | | } | N/A | | | | N/A |
| Date of Collection | 08/27/01 | | | N/A | | | | N/A |
| Units | ug/L | | | ug/L | | | | ug/L |
| Analyte | Result | Q | Com | Result | | Q | Com | Result |
| Perchlorate | 500 | | | 5 | U | | | 5 |

Com - Comments refer to the corresponding section in the report narrative for each letter.

N/A - Not Applicable.

N/R - Not Required.

Q - Refer to data qualifiers.

U - The parameter was analyzed for, but was not detected. The associated value is the sample quantitation limit, adjusted for dilution, if any.

J - The associated value is an estimated quantity.

Filename: 01240AG.123